








07.2—101 Synchronizing idle speed systems

Identification: Information plate in national language on cross member in front of radiator or on cylinder head cover. Adjust engines according to data of respective emission control information plate.

Testing and adjusting values

National version	Idle speed 1/min	Idle speed emission value % CO
 up to 1976	800–900	max. 1.5
 1976		max. 1.0 without air injection
 1976		
 1973	750–900	up to 1.5
 1974 Federal		
 1974 California	700–900	6–8 without air injection
 1975/76	800–900	max. 1.0 without air injection

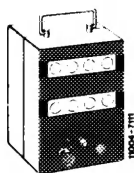
Special tools

Oil telethermometer



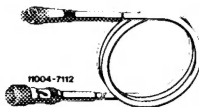
116 589 27 21 00

Digital tester



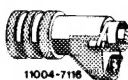
001 589 54 21 00

Connecting cable



000 589 04 90 00

Intermediate plug (adaptor)



000 589 72 63 00

Trigger



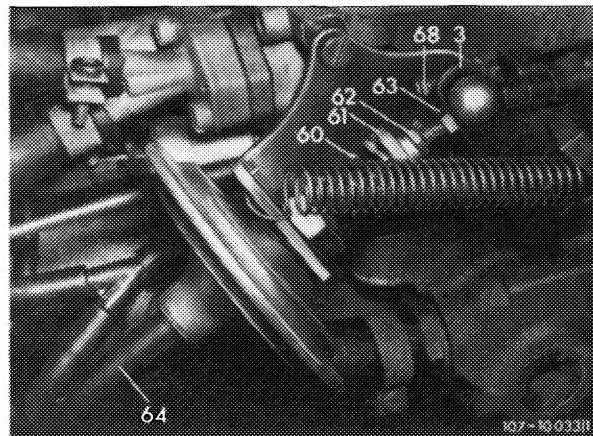
000 589 71 63 00

Conventional tools

Rpm and CO measuring instrument

Synchronizing

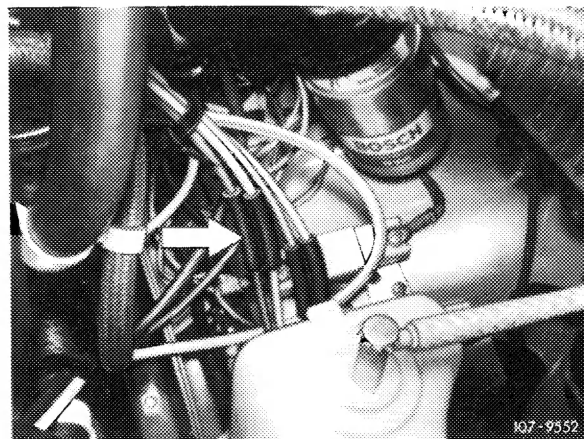
- 1 Connect test instruments. Run engine oil temperature to 60–80 °C.
- 2 Remove air filter.
- 3 Check idle speed and adjust with adjusting screw (68), if required.



- 4 Check idle speed emission value **without air injection**. For this purpose, make air injection inoperative as follows (for **USA** 1973/74 nothing need be made inoperative):

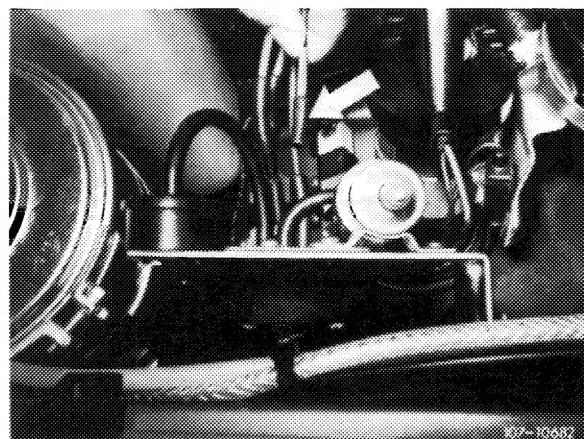
J 1976

Pull off **blue/purple** vacuum line at connecting point (arrow).



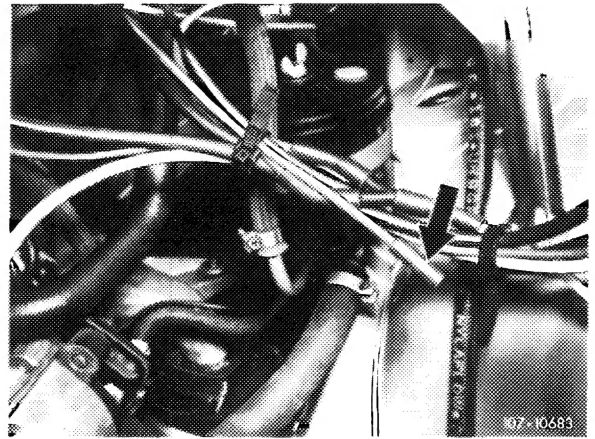
S 1976, model 114

Pull rubber cap (arrow) from **blue/purple** vacuum line.



Ⓢ 1976, model 116

Pull rubber cap (arrow) from **blue/purple** vacuum line.

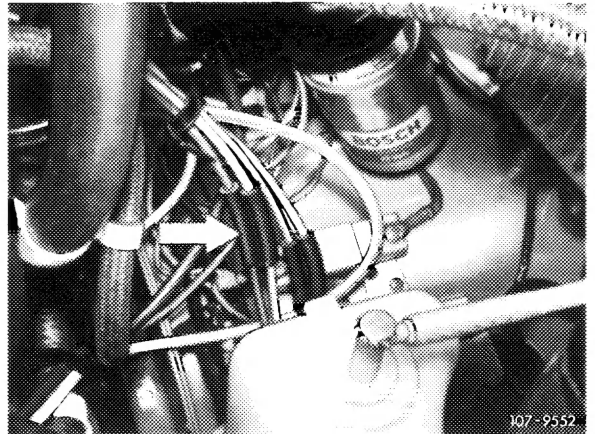


ⓊⓈⓐ California 1974

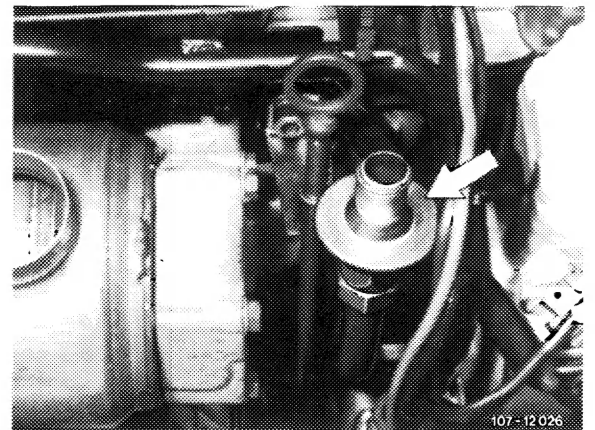
Pull off **red** vacuum line at connecting point (arrow).

ⓊⓈⓐ 1975/76

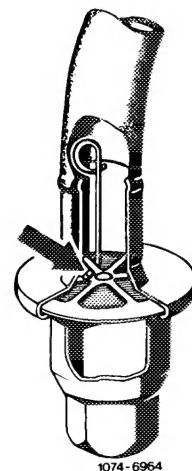
Pull off **blue/purple** vacuum line at connecting point (arrow).



The exhaust gas for idle speed CO measurement on vehicles with catalyst, ⓐ 1976 and ⓊⓈⓐ 1975/76, is drawn off in front of catalyst at check valve (arrow) of air injection.



For measuring idle speed emissions, open valve plate of check valve by means of a self-made wire hook. Connect exhaust gas hose of CO measuring instrument to check valve.

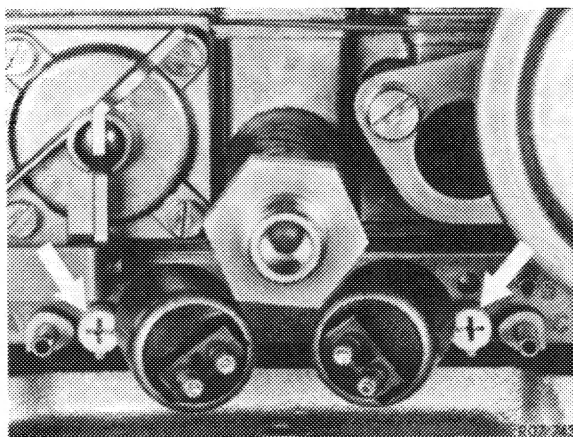


5 Adjust idle speed emission value **without air injection**. For this purpose, adjust both adjusting screws (arrows) uniformly.

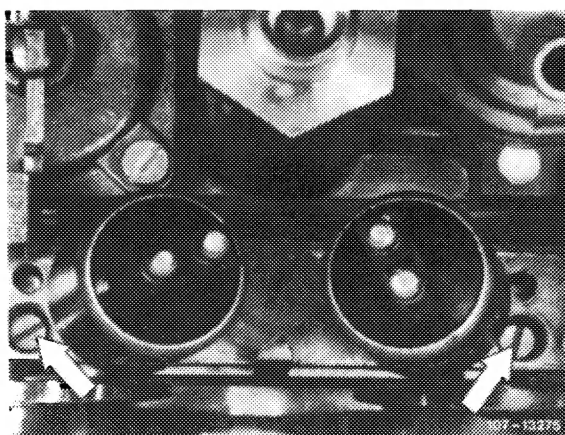
Screwing out = richer

Screwing in = leaner

Accelerate for a short moment, check idle speed and idle speed emission value once again and readjust, if required.

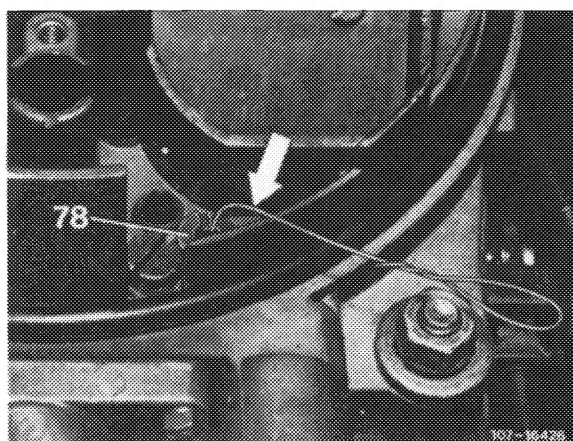


6 Check for uniform adjustment (synchronization) of mixture adjusting screws (arrows).



For this purpose, insert test wire of 0.5 mm dia. (arrow) into both air correction nozzles (78) one after the other and measure CO increase. CO increase **should be uniformly high on both sides**. Readjust with mixture adjusting screws, if required.

Note: To prevent measuring faults, do not insert test wire deeper than 10 mm into idle speed jet. Without test wire the max. idle speed emission value must not be exceeded.



Then check whether the max. permissible idle speed emission value is not exceeded without test wire and **uniformly** adjust both mixture adjusting screws, if required.

7 Reattach vacuum hose for air injection (air injection operating). The idle speed emission value should now be **below** the previously set value.